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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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EXAMINER

WEISKOPF, MARIE

ART UNIT

PAPER NUMBER

3661

DATE MAILED: 10/19/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/698,891

Applicant(s)

LEDINGHAM ET AL.

Examiner

Marie A. Weiskopf

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10/31/2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) _____ is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-37 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____.

DETAILED ACTION

1. Claims 1 – 37 have been examined.

Specification

2. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless – (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1, 4-9, 23-26 and 28-30 are rejected under 35 U.S.C. 102(b) as being anticipated by Glass et al (6,161,097.) Glass et al discloses a automated traffic management system and method comprising:
 - In regard to claim 1, a data manager including a first interface and a plurality of second interfaces, a first database server connected to the data manager via the first interface, a plurality of clients capable of coupling to the data manager via the plurality of second interfaces, and the data manager including a subscription list for the plurality of clients providing updates. (Column 5, lines 18-35)
 - In regard to claim 4, at least one of the plurality of clients is a workstation having a display screen. (Column 7, lines 39-40)

- In regard to claim 5, the plurality of second interfaces each include a server data manager. In the information subsystem integrates other subsystems and provides inter-process management and control. (Column 6, lines 45-53)
- In regard to claim 6, the plurality of clients each include a client data manager. The hardware for the clients includes a workstation which would be standard computer equipment. Although, most of the data management is done on the server, some data management inherently must be done on a client data manager. (Column 7, lines 46-53)
- In regard to claim 7, the data manager includes a flight data entry object list. The Client interface subsystem includes an interface for continuously displaying flight data on a bit-mapped display and for executing various commands to change the flight data or the method of its display. (Column 7, lines 13-16)
- In regard to claim 8, the data manager includes a socket connection list. (Column 7, lines 11-12, 20-22)
- In regard to claim 9, the data manager includes a system list.
- In regard to claim 23, the TSM sends and receives data from multiple subscribers. In order to know if a subscriber has access to send or receive data from the TSM, there must be a list of subscribers. Also, the TSM receives the data update request and changes the data accordingly for the subscribers. (Abstract)
- In regard to claim 24, in order to provide a list of subscribers, there must be some sort of storing criteria for which subscriber gets which information, otherwise

some subscribers would get information that was irrelevant or unhelpful to them.

The client interface subsystem, CIS, allows the user to request which information that receive and store. (Column 22, lines 11-18)

- In regard to claim 25, the new data is updated in the tables in order to provide the subscribers with the newest information that meet their criteria. (Column 17, lines 54-67)
- In regard to claim 26, the data for the database is stored in database tables. (Column 17, lines 54-67)
- In regard to claims 28-30, the tables include flight plan table, radar track table, airline event table, flight info table, and airline schedule table.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 3 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Glass et al (6,161,097) in view of Glass et al (6,278,965.) Glass et al (6,278,965) is a continuation-in-part of Glass et al (6,161,097.) Glass et al (6,161,097), which was discussed above, fails to discuss providing an alternate data manager that is capable of coupling to the primary data manager and also one of the plurality of clients is an external input/output server. Glass et al (6,278,965) discloses a real-time surface traffic adviser, which is discussed as an airport traffic data management system. Glass et al

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(6,278,965) has, in regard to claim 2, an emergency alternative backup system. This would be a second data manager which is capable of coupling to the primary data manager if something was to go wrong in the system. (Column 7, line 63 – Column 8, line 4) Glass et al (6,161,097) does discuss an external input server that connects to the TSM in order to provide real time data over the network. (Column 6, lines 55-63) Glass et al (6,278,965) discusses an actual external input/output server to allow data exchange and common central storage. (Column 12, lines 1-7) It would have been obvious to one having ordinary skill in the art at the time of the invention to include an alternate data manager and also an external server in order to provide a safe back up in case something was to happen to the primary data manager, or for the case of the external server, in order to provide outside information to the data manager.

7. Claims 10, 14-16, 27, 31-37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Glass et al (6,161,097) in view of Mukhopadhyay et al (6,032,158.) Glass et al discusses creating rows in the database tables in order to be able to log changes and movements that happen with the data, however, it is not discussed having secondary, third, fourth or fifth tables for the data. (Column 17, lines 54-67) Mukhopadhyay et al discloses an apparatus and method for capturing and propagating changes from an operational database to data marts. Although Mukhopadhyay et al does not disclose the apparatus and method for an air traffic information system, it is solving the same problem presented. Mukhopadhyay et al discusses using multiple tables in order to capture necessary data. (Column 6, lines 1-18; Figure 3) It would have been obvious to one having ordinary skill in the art at the time of the invention to

instead of creating rows in the tables to store the information as discussed in Glass et al, to store the information in separate tables which specific functions, such as logging changes or movements in the table in order to provide clear and easy data for the database to manage.

8. Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Glass et al (6,161,097) in view of Raz (6,292,827.) Glass et al fails to disclose the first interface using ODBC. It is commonly known to use ODBC, however, Raz specifically states that it is a well-known protocol that establishes a standard way of interfacing with different types of databases. (Column 7, lines 52-54) Therefore, it would have been obvious to one having ordinary skill in the art at the time of the invention to create at least the first interface to be ODBC since it is what is known and common.

9. Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Glass et al (6,161,097) in view of Bowman-Amuah (6,615,253.) Glass et al fails to disclose the TSM having a gateway database server. Bowman-Amuah discloses an efficient server side data retrieval for execution of client side applications. Bowman-Amuah discusses using a gateway database server in order to provide a mechanism for clients to transparently access data in a variety of databases. (Column 52, lines 14-20) It would have been obvious to one having ordinary skill in the art at the time of the invention to use a gateway database server in order to be able to connect to a variety of different databases. Also, using gateway database servers is known in the art.

10. Claims 19-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bowman-Amuah (6,615,253) as applied to claim 18 above, and further in view of

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Mukhopadhyay et al (6,032,158.) Mukhopadhyay et al, as discussed earlier, discloses using multiple tables in order to be able to log data changes or movements. It would have been obvious to one having ordinary skill in the art at the time of the invention to include in the gateway database server the use of multiple tables in order to be able to log data movement and changes easily for the clients based on what type of database they were using.

Conclusion

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

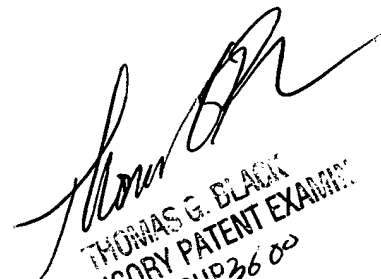
US 6,199,008 to Aratow et al discloses a aviation, terrain and weather display system.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marie A. Weiskopf whose telephone number is (571) 272-6288. The examiner can normally be reached on Monday-Thursday between 7:00 AM and 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Black can be reached on (571) 272-6956. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


THOMAS G. BLACK
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